

# ENGINEERING CHECKS DD 963 CLASS

## AUXILIARIES (AX) PRE-UNDERWAY PHASE

5811	ANCHOR	WINDLASS (Inpor	t Drop Test)
Component/Sub-Con	nponent	Proposed	Accepted
		Procedure	Procedure
Inspect Tech Manual Support			
Inspect PMS Support			
Inspect posted operating/safet	y instructions		
and lubrication data			
Inspect fluid samples			
Inspect for proper HPU fluid			
Inspect for proper lubrication	of mechanical		
components			
Inspect Gauge Calibration			
Inspect relief valve data is pro			
Inspect all flex hoses are prop	erly tested and		
labeled			
Inspect mechanical brake open	ator linkages		
Inspect stroke control linkages	S		
Inspect flange shields			
Inspect for adequate nitrogen	charge for		
windlass			
Inspect speed limiter			
Inspect for adequate LP air pr	essure for chain		
compressor			
Inspect capstan/wildcat brake			
mechanical brake components	(worm gear end		
cap as required).			
Inspect electric brake			
Inspect filter differential indic			
Inspect HPU mechanical seal			
* *	Test Compensating Relief Valve is properly		
set			
Test - Conduct Inport Anchor Drop test			
- Inspect Servo/Replenishment Pressures			
during wildcat operation			
- Inspect Chain Compressor operation			
- Inspect Anchor drops from the hawsepipe			
- Test electric brake operation			

- Inspect reduction gear lubrication	
(gauges/sight flows/dipsticks)	
Test crossover valve operation	
Test wildcat/windlass solenoid switch	
Test Main Relief Valve lifts correctly	

5600 / 5611	STEERING (I	nport System Ve	rification)
Component/Sub-Component		Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOS	S Support		
Inspect PMS Support			
Inspect operating/safety instruc			
system/electrical wiring diagram	ms are posted		
Inspect proper fluid levels			
Inspect hydraulic oil fill connec	ctions are properly		
labeled			
Inspect fluid samples			
Inspect Gauge Calibration			
Inspect rudder stock grounding	straps		
Inspect filter indicators			
Inspect Servo/Replenishment P	ressures are correct		
Inspect all flex hoses are prope	rly tested/labeled		
Inspect flange shields are prope	erly installed		
Test N2 accumulators are property	erly charged		
Test the trick wheel stops			
Inspect the crush block clearan	ces		
Test the rudder follow up error			
0 to 5 deg; 5 deg increments at	5 to 25 deg)		
Test ABT operation			
Test compensator relief valve s	ettings		
Test main relief valve settings			
Test (inport) rudder swing chec	eks		
Test (inport) blocking valve			
Test auxiliary emergency steer	ng pump		
Test manual emergency steering system			
Inspect ram for scoring			
Test steering casualty alarm			
Test pump remote operation and transfer of controls			
to pilot house			
Test for static rudder split (pilo			
Test for indicator error (pilot he	ouse in control)		

5512 / 5513 / 5515 LOW and MEI	DIUM PRESSURE AIR SYSTEM
Component/Sub-Component	Proposed Accepted Procedure Procedure
Inspect Tech Manual and EOSS Support	
Inspect PMS Support	
Inspect Gauge Calibration	
Inspect operating/safety instructions are posted	
Inspect compressor oil level and oil samples	
Test compressor pressures and temperatures	
Test compressor capacity control system	
Inspect compressor belt condition	
Test compressor auto control and safety switches	
a. Operational control switches (115/120/125)	
b. Low oil pressure	
c. High discharge pressure	
d. High air and water temp	
Inspect all relief valve testing is within periodicity	/
Inspect location of intake/vent supply	
Inspect receiver flask certification	
Test priority valve operation	
Inspect sea water cooling system	
Inspect 50/50 mixture of ethylene glycol	
Test type I and type II dehydrator operation	
a. Gauge calibration	
b. Tower operation	
c. Purge air pressure	
d. Automatic drain operation	
e. Dew point	
f. Inspect PMS and Tech Manual support	

5511 / 5515	HIGH PRESSURE AIR SYSTEM		
Component/Sub-	-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EC	SS Support		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect operating/safety instr	uctions are posted		
Inspect compressor oil level	and oil samples		
Test compressor auto control	and safety switches		
a. Start / Stop switch			
b. Low oil pressure swite	ch		
c. Jacket water temp swi	tch		
d. Compressor temp/pres	ssure monitor operation		
Inspect compressor pressures	and temperatures		
Inspect compressor drive bel	t condition		
Inspect condensate monitorir	ng/drain system		
Inspect all flex hoses are pro-	perly tested/labeled		
Inspect all relief valve testing	g is within periodicity		
Inspect HP air flask certificat	tion		
Inspect sea water cooling sys	tem		
Inspect air intake/ventilation	supply location		
Inspect all HP/LP air reducin	g stations		
Inspect fresh water pump belts			
Inspect capacity			
Inspect oil wipers			
Inspect pressure regulator valve			
Inspect 50/50 mixture of ethylene glycol			
Inspect seals for oil leaks			

5210	FIRE PUMPS (ELECTRIC and STEAM)		
Component/Sub-C	omponent	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS	S Support		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect Transducer Calibration			
Inspect Coupling Guard			
Inspect relief valves are within	periodicity		
Test remote start/stop functions	}		
Test local start/stop functions			
Inspect pump operation/design unusual noise, bearing temps, e			
Test the over speed trip (STEA			
Test the speed limiting governo			
Test the turbine auxiliary lube of automatic start switch operation	oil pump low-pressure		
Inspect lube oil filter indication (STEAM)	,		
Test combination exhaust and r	elief valve (STEAM)		
Inspect the packing and mechan	nical seal leakage		
Inspect for ferrous fasteners			
Inspect the resilient mounts			
Inspect condition of expansion joints			
Inspect all flex hoses are properly tested/labeled			
Inspect piping lagging		·	
Inspect grounding straps			
Test remote operated suction/discharge valves		·	
Inspect the suction strainer			

5240	SEAWATER	SERVICE PUM	IPS
Component/Sub-C	omponent	Proposed	Accepted
		Procedure	Procedur
			e
Inspect Tech Manual and EOSS	S Support		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect Transducer Calibration			
Inspect Coupling Guard			
Test remote start/stop functions	}		
Test local start/stop functions			
Inspect pump operation/design	discharge pressure,		
unusual noise, bearing temps, etc.			
Inspect packing and mechanica	l seal leakage		
Inspect for ferrous fasteners			
Inspect foundation and resilient	t mounts		
Inspect condition of expansion			
Inspect all flex hoses are proper	rly tested/labeled		
Inspect piping lagging			
Inspect grounding straps			
Test remote operated suction/discharge valves			
Inspect the suction strainer			
Test the firemain to seawater re			
operation, condition and relief	valve test periodicity		

5140	AIR CONDITIONING PLANTS		
Component/Sub-	-Component	Proposed	Accepted
	•	Procedure	Procedure
Inspect EPA certifications			
Inspect Tech Manual and EC	OSS Support		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect operating/safety instr	ructions are posted		
Inspect compressor oil level	and oil samples		
Inspect warning at entrance (	Freon usage) posted		
Inspect Refrigerant logs			
Test halocarbon monitor of	peration		
Test capacity control system	operation		
Test calibration of safety shu	tdowns/alarms		
a. HP/LP pressure switch	nes		
b. C/W, S/W flow/press/	temp switches		
c. Low refrigerant temp	switch		
d. Low oil pressure switc	h		
Inspect moisture indicators			
Test compressor operation (p	parameters, suct/disch		
valves)			
Test for leaks (oil/freon/wate	er)		
Inspect chilled water pump			
a. suction valve			
b. discharge valve			
c. mechanical seal			
Inspect chilled water expansi			
<ol> <li>a. Proper operating leve</li> </ol>	1		
<ul> <li>b. Filling pipe air gap</li> </ul>			
c. Relief valves and vac	uum breakers		
d. Hose disconnects and	warning sign		
Test PPU			
Inspect recovery unit (Invent	•		
Inspect for available vacuum	pump		
Inspect sea water system			
a. Pump operation			
b. Zincs and nylon tube inserts present			
c. Condenser header condition			
d. Seawater Regulating valve			
Inspect motor controller			
Inspect coupling guard			
Inspect resilient mounts			

# AUXILIARIES (AX) UNDERWAY DEMO PHASE

5811	ANCHOR WINDLASS DROP AND RETRIEVAL DEMONSTRATION		
Component/Sub-Component		Proposed Procedure	Accepted Procedure
Test – Conduct Anchor Drop and Retrieval test			
- Inspect Servo/Replenishment and Main Relief Pressures during wildcat operation			
- Inspect Anchor drops from the	ne hawsepipe		

5600 / 5611	STEERING DEMONSTRATION		TION
Component/Sub-C	omponent	Proposed	Accepted
		Procedure	Procedure
Inspect proper fluid levels			
Inspect correct Servo/Replenishment pressures			
Test - Demonstrate timed rudder swing checks/			
blocking valve test Ahead (as per provided			
procedure)			
Test - Demonstrate timed rudder swing checks/			
blocking valve test Astern (as per provided			
procedure)			
Inspect for dynamic rudder spli	t from helm indicator		

5331	WATER HEATERS		
Component/Sub-	-Component	Proposed	Accepted
		Procedure	Procedure
Inspect Tech Manual and EC	SS Support		
Inspect PMS Support			
Inspect list of heaters onboar	d and spaces hot water		
services (berthing/laundry/ga	ılley)		
Inspect gauge calibration			
Inspect outlet temp at heater	(verify operation)		
Inspect relief valve test data			
Inspect relief valve drain piping			
Inspect cold water inlet pipe	for check valve		
Test high temp switch setting			
Test high temp switch warning	ng light		
Inspect lagging condition			
Inspect for steam / water leaks			
Inspect Temp Reg Valve for locking device			
Inspect heater foundation			
Test water temp at basin/spig	got		

5351		ER and COPPE STEAM PIPING	
Component/Sub-Compo	nent	Proposed Procedure	Accepted Procedure
Inspect Gauge calibration			
Inspect PMS Support			
Inspect warning placard posted – war pressure before disconnecting	rning bleed		
Inspect piping/valve condition and or	peration		
Inspect protective cover			
Inspect relief valve for test data			
Inspect overall area preservation			
Inspect ship has reviewed NAVSEA Wash DC R 130557Z FEB 01 concerning copper piping			
Inspect the ship has established an inspection program IAW NAVSEA message			
Inspect - Conduct a walkthrough of all copper service steam piping to check for leaks IAW NAVSEA message			

5315	WATER PRODUCTION DEMONSTRATION – REVERSE OSMOSIS		
Component/Sub-Compon	ent	Proposed Procedure	Accepted Procedure
Inspect Tech Manual Support			
Inspect PMS Support			
Inspect relief valves are within period	icity		
Inspect HP pump oil level			
Inspect flexible hose condition and tes	st tag		
Test salinity dump valves			
Test salinity panel			
Inspect Accumulator Pressure			
Test the operation of the product and l	brine		
flowmeters			
Test - Demonstrate 80% water production capability			
during the 4 Hour Water Production I			
- Inspect RO to ensure the unit has no			
produce above maximum recommende			
(discharge pressure setting, production			
injection temperature diagram curve and tables)			
- Inspect the operating panel for alarm / unusual			
conditions.			
- Inspect 3 and 20 micron filter differential pressure			
- Inspect all fittings and connections for leaks			
- Inspect demineralizer operation			
Inspect freshwater flush			

5311	WATER PRODUC FLAS	CTION DEMON SH TYPE EVAP	·-
Component/Sub-Co	mponent	Proposed Procedure	Accepted Procedure
Inspect PMS and Tech Manual s	upport		
Inspect gauge calibration			
Test flow meter			
Inspect evaporator shell (sight gland scale buildup)	lasses, diffuser cap		
Test salinity dump valves			
Test interlock device between po	otable water and feed		
water valves			
Inspect feed pump (labeled, pack	king gland,		
foundation, seal / gland cavity)			
Inspect brine pump (labeled, pac	king gland,		
foundation, seal / gland cavity)			
Inspect distillate pump (labeled,	packing gland,		
foundation, seal / gland cavity)			
Inspect brine pump (labeled, pac	king gland,		
foundation, seal / gland cavity)			
Inspect heater drain pump (labeled, packing gland,			
foundation, seal / gland cavity)			
Inspect flexible hose condition and test tag			
Inspect feedwater strainer (foundation and basket)			
Inspect pipe labeling and lagging condition			
Test - Demonstrate 80% water production capability			
during the 4 Hour Water Production Demonstration			

8543	DUMBWAITER	
Component/Sub-Component	Proposed	Accepted
	Procedure	Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect posted operating/safety instructions at each		
station		
Inspect posted lubrication chart at top station		
Inspect trunk bi-parting doors		
Inspect machinery access cover bolts & nuts		
Inspect machinery oil level		
Inspect hoist machinery mounting hardware		
Inspect hoist drum		
Inspect hoist wire rope and end fittings		
Test slack rope device and limit switch		
Test the hoist brake		
Test the up over travel limit switch		
Test the up deck level limit switch		
Test trunk bi-parting door limit switch		
Inspect car broken rope device		
Inspect car bi-parting door assembly		
Inspect car for missing components		
Test lower level trunk bi-parting doors and limit		
switch		
Test down over travel limit switch		
Test down level limit switch		
Inspect trunk buffer springs		
Test E-call and sound powered phone system when		
installed		
Inspect clean out cover mounting hardware		
Inspect motor controller for loose leads, posted		
placards, grounds and correct fuses		
Inspect dumbwaiter trunk for preservation and		
cleanliness		
Inspect guide rails		
Test each control station E-stop button		

8543	8543 PAC		CKAGE CONVEYOR	
Component/Sub-Compone	Component/Sub-Component		Accepted	
		Procedure	Procedure	
Inspect Tech Manual and EOSS Support	ort			
Inspect PMS Support				
Inspect posted operating/safety instruct	tions (two man			
rule/ do not ride) at each station				
Inspect posted lubrication chart at top s				
Test for audible warning when starting	•			
Inspect that all station doors are locked				
Inspect that all station controllers are lo	ocked			
Test door interlock system				
Inspect load/unloader at each station				
Test door cannot close when loader/un	loader is in			
horizontal or 30 deg inclined position				
Test loader/unloader down interlock sv	vitch at each			
station below upper most level				
Test jam limit switch at each station				
Inspect safety shields are properly insta				
Test up-over travel switch/device operation				
Test clean out door interlock switch if	• •			
Test down overtravel device and switch	h			
Test indexing feature				
Test E-stop and run/stop buttons at all	stations			
Inspect proper florescent lighting at each				
Inspect trunk shielding and mounting h	nardware			
Inspect trunk guide rails				
Inspect conveyor trunk for preservation	n/cleanliness			
Inspect all carrier trays are installed an	d tight			
Test all station growlers and phone circ	cuits are			
functional and headsets are present				
Inspect conveyor has been load tested	within the last			
five years to include weight test data				
Inspect speed reducer is filled to proper level with oil				
Inspect drive, driven and carrier chains are properly				
tensioned				
Test bite panel for correct components and proper				
operation				
Inspect motor controller for loose leads, posted				
	placards, grounds and correct fuses			
	Inspect drive machinery for missing/loose			
components				

5161	REFRIGERATION PLANTS		NTS
Components/Sub-Con	nponents	Proposed Procedure	Accepted Procedure
Inspect EPA certifications			
Inspect Tech Manual and EOSS S	Support		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect operating/safety instruction	ons are posted		
Inspect compressor oil level and o	oil samples		
Inspect warning at entrance (Free	n usage) posted		
Inspect Refrigerant logs			
Test halocarbon monitor opera	tion		
Test capacity control system oper	ation (vent plug)		
Test calibration of alarm / shutdo	wns		
a. HP / LP pressure switches			
b. Sea water flow / pressure	switch		
Test compressor operation (paran	neters,		
suction/discharge valves)			
Inspect for piping suppressors			
Inspect for leaks (oil/freon/sea wa	nter)		
Inspect refrigerant recovery syste	m/vacuum pumps		
Inspect sea water system (pump operation, zincs,			
nylon tube inserts, and condenser header)			
Test chill/freezer boxes for fan operation, lighting,			
coil condition and curtains			
Inspect ventilation (flow/location/indicators and			
alarms			

6641 FA	FAN ROOMS	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect deck condition		
- No standing water		
- Deck rusted / exfoliated		
- Deck drain not installed		
- Deck drain missing, not secured within deck socket		
or inoperative		
Inspect deck/bulkheads have no painted over rust		
Inspect lighting is operative and covers installed		
Inspect adequate lighting present in space		
Inspect vent duct condition		
- Access covers present		
- Access cover fasteners not rusted/missing		
- Duct interior is clean		
Inspect correct vent/piping system labeling		
Inspect fan motor installed correctly (flow)		
Inspect filters are clean and can be easily removed		
Inspect filter DP gauge is operative		
Inspect vent heating element is operative and not deteriorated		
Inspect cooling coils are clean		
Inspect thermostatic controls are calibrated, connected and operational		
Inspect the cooling coil drain is piped to the deck		
drain and is not clogged		
Inspect the proper color coding of piping		
Inspect that all hand wheels are present		
Inspect for damaged / missing lagging		
Test the C/W or steam solenoids are operational		
Inspect for chilled water / steam leaks		
Inspect for bull's eye and CCOL in space		
Inspect for any unauthorized stowed material		
Inspect for any unauthorized flammables		
Inspect the filter cleaning shop		

5331	POTABLE WATER PUMPS		MPS
Component/Sub-Comp	ponent	Proposed Procedure	Accepted Procedure
		riocedure	riocedule
Inspect Tech Manual and EOSS Su	upport		
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect Transducer Calibration			
Inspect Coupling Guard			
Test local start/stop functions			
Inspect pump operation/design discharge pressure,			
unusual noise, bearing temps, etc.			
Inspect packing and mechanical se	al leakage		
Inspect for ferrous fasteners			
Inspect foundation and resilient mounts			
Inspect all flex hoses are properly	tested/labeled		
Inspect grounding straps			

# ELECTRICAL (EL) PRE-UNDERWAY PHASE DD 963

3113 / 3202	SHIPS SERVICE GAS TURBINE GENERATORS		
CC	DMPONENT/SYSTEM	PROPOSED PROCEDURE	
Test Dead Bus S	Start Logic	A-9R	
Test reverse pov	ver relays	R-19	
Test Fault currer	nt detect	18M-7R	
Test parallel ope	eration	IAW EOP	
Test manual load	d shedding	18M-4R	
	ELECTRICAL PLANT CONT	ROL CONSOLE (EPCC)	
CC	OMPONENT/SYSTEM	PROPOSED PROCEDURE	
Perform Process	sor Self-Test	IAW EOP	
3143	400 HERTZ DISTRIBUTION SYSTEM (CONVERTERS)		
COMPONENT/SYSTEM		PROPOSED PROCEDURE	
	Test Frequency Changer 60 Hz input circuit A-6 breakers shunt trips.		
Test split and pa	Γest split and parallel operation IAW EOP		
4221	4221 TELL-TALE PANEL/NAVIGATION SIGNAL LIGHT PANE		
CC	OMPONENT/SYSTEM	PROPOSED PROCEDURE	
Test navigational lighting panel		R-2	
Measure insulation resistance of Navigational Lighting Panel		S-1	
Measure insulation resistance of Signal light Panel		S-1	

4331	ANNOUNCING SYSTEMS		
COMPONENT	SYSTEM	PROPOSED PROCEDURE	
Test general, che stations	mical, and collision alarms from all	Q-1R	
Test 1MC from a	ll stations	Q-1R	
Test 5 MC opera	tion	Q-2R	
Test 6MC operat	ion	Q-1R	
Measure speaker	group insulation resistance	A-1	
Test 21MC opera	ation	Conduct Operational Test	
4751	DEGAUSSIN	G SYSTEM	
СО	MPONENT/SYSTEM	PROPOSED PROCEDURE	
Conduct linearity	/ test	Q-1	
Conduct ground	test.	M-2	
Inspect degaussin	ng folder	NAVSEA TECH MANUAL	
3202	AUTOMATIC BUS TRA	NSFER EQUIPMENT	
СО	MPONENT/SYSTEM	PROPOSED PROCEDURE	
Test all Engineer	Test all Engineering ABT's.		
Test all remainin	g ABT's. (Day 2)	Q-1R / Q-2R	
4371	EVAPOR	ATORS	
СО	MPONENT/SYSTEM	PROPOSED PROCEDURE	
Test dump valve	operation	S-2	
Test alarm settings		S-2	
4373	4373 WIND INDICATING SYSTEM		
COMPONENT	SYSTEM	PROPOSED PROCEDURE	
Test System For Proper Operation R-		R-1M	

5081	THERMAL IMAGING SURVEY	
COMPONEN	VT/SYSTEM	PROPOSED PROCEDURE
Commence Thermal Imaging Throughout The Ship NOTE: Any equipment surveyed that has a temperature rise of 40 degrees centigrade or above (3 or 4 star) must be repaired or tagged out prior to getting underway. The items will not be available until repairs are completed and re-shot for verification		R-1 / R-2
2521	UNINTERRUPTED POWER SUPPLIES (UPS)	
COMPONENT/SYSTEM		PROPOSED PROCEDURE
Test EPCC UPS for proper operation		R-1
Test CISE UPS for proper operation		R-2
Test PAMCE UPS for proper operation		R-2
Test PLCEE UPS for proper operation		R-2
Test S/CE 2 or 3 UPS for proper operation		R-2

### ELECTRICAL (EL) UNDERWAY PHASE

**NOTE**: Electrical Underway Checks Consist Mainly Of Space Walk-Through Throughout The Ship.

In each space inspect the following if applicable:

#### (INSPECT) FUSE BOXES

· · · · · · · · · · · · · · · · · · ·	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Are fuses pulled from designated circuits without danger tags affixed?	NSTM 300 - 2.4.1
Are there loose or missing locking nuts or gear adrift?	NSTM 300 – 4.8.1
Are circuits properly labeled for easy identification?	GSO 305E
Are there any bent, twisted, misaligned, or broken fuse clips?	NSTM 300 4.8.1
Is the interior rusty or dirty?	NSTM 300 – 4.8.1/5.2.4
Are fuses of the correct amperage and voltage	GSO 303F
installed?	NSTM 320 – 1.7.4
Are circuits fed from one set of fuses (except battle lantern circuits) multiple?	GSO 331C
Are fuse clips phosphor-bronze instead of silver plated?	NSTM 300 – 4.8.1.2
Were door hinges broken?	5100.19 SERIES NSTM 300
Are non-silver ferruled fuses installed?	NSTM 300 - 2.5.4
Are circuits over fused?	NSTM 300 – 2.5.4
Is clearance provided to permit complete accessibility for maintenance, repair, renewal of fuses, and testing?	GS0 300D

#### (INSPECT) BATTLE LANTERNS

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were relay-operated lanterns installed in sufficient number?	NSTM 330 – 1.6.4.3.3.1
Are lanterns installed with suitable bracket assemblies to prevent removal of lantern?	NAVSEA 0964-000-2000 NSTM 300
Were lanterns inoperative?	NSTM 330 – 3.6.2
Were test switches and relay frames grounded?	NSTM 330 – 2.1.8

(INSPECT) BATTLE LANTERNS (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were lanterns located in explosion proof enclosures (prohibit)?	NSTM 330 – 1.6.4.3.2.2
Were NEALS lanterns installed and were they charged (red indicator)?	NSTM 330 – 1.6.4.3.2
Were relay operated lanterns fused?	NSTM 330 – 1.6.4.3.3.3
(INSPECT / TEST) SHORE POV	WER SYSTEM
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is shore power being properly rigged?	NSTM 320-2.2.7
Did shore power shunt trip interlocks trip its	IAW PMS
associated breakers when tested?	IAW EOSS
	GSO 320D
Was shore power system cabling between the	SPRU
receptacles and the ship's switchboard insulation	NSTM 300/320
resistance within EOSS or PMS Limits	
Were shore power indicating lights operative, white in color, and all screws installed?	NSTM 320 – 2.2.9
Were warning signs posted?	GSO 070H
Was there pigtail stowage installed?	GSO 320D
Does the shore power system meet the current	GSO 320D
standards:	
<ul> <li>Have a Viking Connector System</li> </ul>	
<ul> <li>Have AQB-LF400 Amp Circuit Breaker</li> </ul>	
with shunt trip	
- Have a phase sequencing and phase	
orientation devices.	
- Have installed ammeter and selector switch	
to monitor total shore power current.	

(INSPECT) CATHODIC PROTEC	TION SYSTEM
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was the installed Cathodic Protection System operative and adjusted	GSO 633C
Were the rudder grounding straps made of 1-1/2 inch	NSTM 633 – 3.3.2.7
wide braided copper and brazed to the rudder stock and the hull?	GSO 633C
Has the system been turned off greater than 15 days?	GSO 633G
Was brush rigging correctly installed?	NSTM 633- 3.3.2.6
Were shaft grounding brushes correctly installed?	NSTM 633
	ICCP Tech Manual
Did shaft grounding brushes exhibit full contact with	NSTM 633 – 3.3.2.6
the slip ring?	ICCP TECH MANUAL
(INSPECT / TEST) ALARM S	SYSTEMS
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Test alarm switchboards and panels.	4351/Q-2
Were any alarm and warning systems inoperative or missing parts?	GSO 433J
(INSPECT) ORDER/INDICATING/ME	TERING SYSTEMS
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were Tank Level Indicators (TLI's) out of calibration or inoperative?	GSO 437 E
Were valve position indicator circuits misadjusted or inoperative?	GSO 430H
Were there missing or inoperative salinity cells?	GSO 531B
	IAW PMS
MOTOR CONTROLLE	ERS
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were interiors dirty, rusty, deteriorated, or contained	NSTM 302-3.3.2
gear adrift?	GSO 320F
Were wiring diagrams, schematics or overload heater tables missing?	NSTM 302-3.3.1

MOTOR CONTROLLERS (CON'T)		
COMPONENT/SYSTEM	PROPOSED PROCEDURE	
Was controller electrical wiring properly banded?	ELECT PLT. INST. STD METHODS/GSO 302F	
Were Start, Stop, "Emergency Run" or Reset buttons seized, missing or inoperative?	3001/S-1/18M-1	
Were rubber boots cracked, torn or missing?	NSTM 300-3.2.2 3001/S-1/18M-1	
Were overload relay heaters properly sized and adjusted to provide adequate protection for the motor?	NSTM 302-3.3.2 GSO 302G	
Were switches protected against inadvertent activation?	GSO 070H	
Were controllers with multiple power sources properly labeled?	GSO 305C	
Were motor foundations properly preserved?	GSO 631J	
Were controllers and remote operating stations properly labeled?	GSO 305C	
Is clearance provided to permit complete accessibility for operation, maintenance, repair, renewal of fuses, and testing?	GSO 300D	
WORKBENCHES		
COMPONENT/SYSTEM	PROPOSED PROCEDURE	
- Does the workbench conform to standards set forth in NSTM 300 APP H? (Insulation, ground straps, disconnect switches, labeling, ground connections, etc)	NSTM 300 GSO 320E GSO 665 GSO 650	
(INSPECT) ELECTRICAL SAFETY		
COMPONENT/SYSTEM	PROPOSED PROCEDURE	
Were flat irons a high-grade commercial type with a three pronged cord?	NSTM 300-2.7.3.6 GSO 640G	

Were Ironing Board Stations in berthing space modified to remove spotlight and fill the access hole? Ensure irons are not hardwired.	GSO 640G
(INSPECT) ELECTRICAL SAF	ETY (CON'T)
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Have shorting probes been modified by installing a nylon screw in the end of the probe and soldering the clip to the conductor?	NAVELEX 0101, 110A FIG 1- 3 IAW PMS
Are portable tools/devices not stamped "Double Insulated" or equipped with a three pronged cord?	NSTM 300-2.7.3.3 IAW PMS
Were Hospital grade plugs used on portable equipment?	NSTM 300-2.7.3.2.8
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4.3.3
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2.2.4 NSTM 330-2.2.9
Were light fixtures missing lenses, protective guards, or faceplates?	NSTM 330-2.1.4 NSTM 330-2.2.6
Did diesel module room have adequate lighting?	GSO 331B GSO 332E
Were spray-tight fixtures adequately protected against water intrusion?	NAVSEA 0964-000-2000
Was bunk lighting cable hanging, or not routed through the inside of bunk stanchions?	NAVSEA 0964-000-2000
(INSPECT) CABLIN	G
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was PVC cabling installed (new construction only)?	GSO 304D
Were dead-ended cables properly identified/terminated?	NSTM 300-4.6.7 GSO 304E NSTM 300-4.6.9 DOD-STD-2003-1
Were useless or improperly installed cables removed?	NSTM 300-4.6.7.1 GSO 304E
Was cabling properly supported, routed or were nylon wire ties being utilized?	

(INSPECT) CABLING (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were cables pulling out of equipment?	GSO 331E
Were cables improperly spliced?	GSO 304E NSTM 300-4.6.8 DOD-STD-2003-1
Were cables protected against being handholds or being stepped on?	GSO 304E
Was cabling run through beams without the use of chaffing rings?	NSTM 300 TABLE 300-4-4 GSO 304E
Was cabling running through metal partitions equipped with grommets?	GSO 304E NSTM 320-1.6.11
Were cable stuffing tubes properly assembled?	NSTM 300-4.6.10.1 NSTM 300 TABLE 300-4-4 NSTM 320-1.6.11 GSO 304E
Were multiple cables running through one stuffing tube?	GSO 304E NSTM 300 TAB. 300-4-4
Were multi-cable penetrators installed in Flammable Liquid Storerooms?	GSO 304E MIL-STD-1310
(INSPECT) BUS TRANSFER E	QUIPMENT
COMPONENT/SYSTEM	PROPOSED PROCEDURE
<ul> <li>Were ABT's installed for the following:</li> <li>Emergency Lighting.</li> <li>IC Switchboard and panels.</li> <li>Steering power panel.</li> <li>Pumps associated with the main and auxiliary machinery plant having Low Voltage Release (LVR) control.</li> <li>Fire pumps.</li> <li>Fire extinguishing auxiliaries and controls.</li> </ul>	NSTM 320-1.3.2 GSO 320D
Did ASCO ABT transfer switches have an electrical charge on the metal screw on the manual operator?	NAVSEA FSC SER 03E2/03E2-234
Was the sliding interlock on manual bus transfer switches effective at preventing both breakers from being closed at the same time?	NSTM 300-4.8.4.2

Are feeder circuit breaker megger holes blanked off?	NAVSEA 230319ZNOV 98
Were Normal/Alternate source indicating lights operative?	NSTM 320-2.2.6.4
(INSPECT) SHIP TELEPHON	E SYSTEM
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was the system unreliable due to unresolved software or hardware deficiencies?	NSTM 430-3 GSO 432
Test battery back-up for telephone system	NSTM 313-2.5 GSO 313J
(INSPECT) MOTOR	S
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were motor foundations properly preserved?	NSTM 300- 5.4.3.10 GSO 631J
Was resilient mounted electrical equipment groundedto the ships hull through ground straps?	NSTM 300- 2.2.1
Did electrical rotating machinery have ball check grease fittings (zerk fittings) installed?	NSTM 244
Were coupling, belt, or chain guards effective?	GSO 320E
POWER PANELS	<u> </u>
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Do labels specify the proper information?	GSO 305E
Do Breaker ratings match the circuit label current rating?	GSO 305E
Are multi-phase circuits missing breaker connecting handles?	GSO 324C
Were power panels located inside galley spaces?	GSO 320E
Is clearance provided to permit complete accessibility?	GSO 300D
CASUALTY POWER CA	BLES
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were cable ends properly terminated?	GSO 304E NSTM 320-3.4.1 DOD-STD-2003
Were cables deteriorated from age, heat, and humidity?	NSTM 079-47.4.2.2.10
Were normally energized power terminals labeled?	NSTM 320-1-2-8-2

Were racks properly identified as to number/length of cables assigned to the rack?	GSO 305F
CASUALTY POWER CABLE	S (CON'T)
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is there a label attached at the end of the cable to indicate the length and stowage rack number?	GSO 305F DOD-STD-2003
Are cable leads properly identified for phase identification?	NSTM 320-1.2.8.2
Were cable ferrules missing or heavily oxidized?	NSTM 079-47.4.2.2.6
Was an improper number/length of cable installed on a cable rack?	NSTM 079-47.5.6.1 GSO 320G
Were wrenches missing from terminals?	NSTM 079-47.4.2.3.3
Were covers installed on power terminals?	NSTM 079-47.4.2.3.4 NSTM 079-47.4.2.3.6 GSO 320G
ELECTRICAL DISTRIBUTION	EQUIPMENT
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was electrical distribution equipment securely mounted? Electrical distribution equipment have loose or	NSTM 300-4.3.3 GSO 300D NSTM 300-4.3.3
missing covers?	
Were control knobs or fasteners missing from electrical equipment?	NSTM 300-4.3.3
Was electrical equipment protected from water	NSTM 300-4.4.1
intrusion?	NSTM 300-4.4.5
Is electrical properly mounted or was it suspended solely by electrical cables?	NSTM 300-4.3.3
Were 440 multipurpose outlets properly phased?	NSTM 320-1.4.1
Did Standard Navy Receptacles (SNR) and Multi-Purpose Outlets (MPO) have an interlock switch or was the switch function such that the plug could not be removed from an energized receptacle?	NSTM 320-1.4.1
Were electrical receptacles broken or damaged?	NSTM 300-2.7.6
Were 400HZ AC, 60HZ AC, and DC convenience	GSO 320

outlets labeled to prevent equipment being used with the wrong frequency?	
SOUND POWERED TELEPHON	IE SYSTEMS
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were any Sound Powered Circuits below 50,000 ohms resistance to ground?	GSO 432I
Were Sound Powered Call Signal Stations (growlers) inoperative, corroded, damaged or missing parts?	NSTM 430
Were Sound Powered Jackboxes improperly labeled, corroded, damaged, or missing parts?	NSTM 430-3.2
(INSPECT) LIGHTIN	IG .
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were darken ship switches operative and adjusted properly? Ship provide list of darken ship switches for survey.	DOD-HDBK-289 NSTM 330-3.6.5
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2
Were light fixtures missing lenses, protective guards, of faceplates?	r NSTM 330-2
Were spray-tight fixtures adequately protected against water intrusion?	NSTM 300-4
Did diesel module room have adequate lighting?	GSO 331B/332E
(INSPECT) BATTERY LO	CKERS
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was a Battery Log maintained?	NSTM 313-2 GSO 313F
Is there an electrical interlock between exhaust ventilation and battery charger?	5100.19C C0904 NSTM 313
Test ventilation interlocks	3131/S-2
Are Alkaline and Lead Acid Batteries being serviced in the same facility?	GSOF
Is each locker provided with:  - Rubber Gloves and Aprons.  - Goggles.  - Two battery fillers.	5100.19 GSO 313F NSTM 313
<ul><li>Two battery test sets.</li><li>One soda water container.</li></ul>	

Does the locker contain an eye wash station and a	NSTM 313-2
deluge shower?	

(INSPECT) BATTERY LOCKERS (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Are battery storage racks greater than 12 inches between tiers?	GSO 313F
Were battery hold-down clamps provided?	GSO 313F
Are Acids stored in appropriate protective containers?	GSO 313F
Are battery charger plugs and jacks marked NEG. and POS.?	GSO 313F
(INSPECT) MISCELLANEOUS E	QUIPMENT
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is permanently mounted electrical equipment hardwired to the ships electrical system?	NSTM 330-1
Is hardwired electrical equipment permanently mounted?	NSTM 330-1
Was more than 1 multi-purpose power strip connected to one isolated receptacle circuit?	NSTM 300-2.7
Is electrical equipment mounted on non-conducted surfaces properly grounded?	3000 / A-5
Were Surge Protectors of the approved type?	3000 / A-4R
Are portable electric device power cords properly tinned?	3000 / Q-1R
Are permanent-type safety precautions, operating instructions, high voltage warning signs, and resuscitation instructions installed where required?	NSTM –H.5, I-2
Did electrical connection boxes have knockouts pushed in leaving access holes In the side?	NSTM 300-2.
Are non-watertight connection boxes being used in engineering spaces?	GSO 300D
Was rubber matting oil soaked, cracked, punctured, perforated or had imbedded metal or conductive particles?	GSO 634B

(INSPECT) MISCELLANEOUS EQUIPMENT (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Did dress ship lights have broken, missing, or incorrect guards?	NSTM 330-1 3000/ R2
Were dress ship light receptacles labeled "Dress Ship Light Streamers. Not to be used for any other purpose"?	
Were panel switches controlling circuits that are de- energized during darkened ship operation marked DARKENED SHIP?	NSTM 330-1-
	NSTM 330-1
Had the float charge on the UPS batteries been reduced from 135vdc to 129vdc?	
	IAW PMS
Was UPS electronic cabinet bottom sealed to prevent water of oil entry from lower level engine room?	GS0 300D/324D NSTM 300-4

# ELECTRICAL (EL) POST-UNDERWAY

### **DD 963**

22 > 00			
	OPEN AND INSPECT AS REQUIRED BY THE INSPECTION		
COMPONENT/SYSTEM		PROPOSED PROCEDURE	

# WASTE HEAT BOILERS PRE-UNDERWAY PHASE DD 963

	Waste Heat Boiler		
C	omponent/Sub-Component	Proposed Procedure	Accepted Procedure
Verify proper	lay up		
Test safety val	ves/hand easing gear		
Test feed wate	r control valve		
Test control co	ondenser sw reg valve		
Test condensat	te cooler sw reg valve		
Test (shift) sw	strainer		
Test steam sto	p valve		
Test dump val	ve		
HOT PLANT	:		
Test low contr	ol air pressure		
Test high wate	r level alarm		
Test low water	level alarm		
Test low/low v	vater level alarm		
Test low steam	n pressure alarm		
Test high stear	n pressure alarm		
Soot Blow Bo			
Inspect boiler	casing for leaks		
Test gauge gla	ss remote isolation		
Inspect gauge	glass lighting		
Inspect bottom	blow valves		
Inspect gauges			

FEED & CONDENSATE SYSTEM:			
Component/Sub-Component		Proposed Procedure	Accepted Procedure
Inspect feed pump mechanical seal leakage			
Inspect recirc pump mechanical seal leakage			
Inspect gauges			
Test feed/drain tank high/low alarm			
Test salinity alarms			
Inspect condensate cooler			
Inspect control condenser			
		DFT	
Component/Sub-Component		Proposed Procedure	Accepted Procedure
Inspect relief valve			
Test high water alarm			
Test low water alarm			
Test gauge glass isolation			
Test gauge glass lighting			
ADM	INISTI	RATIVE PROG	RAMs
Component/Sub-Component		Proposed Procedure	Accepted Procedure
BW/FW records (last 3 months)			
Bottom blow UT records			
Boiler workcenter CSMP			
Oil lab workcenter CSMP			
Boiler related CASREP's			
Boiler related DFS's			
Daily fuel & water report			

# MAIN PROPULSION (MP) PRE-UNDERWAY PHASE DD 963

	MAIN ENGINES		
Co	omponent/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Gas Tu	arbine/Enclosure Assembly		
- Gas Generato	or Assembly		
- Power Turbin	ne Assembly		
- Transfer Gea	r box and components		
- Base penetra	*		
- Bleed Air Ma	anifold		
- Base Enclosu	re Interior		
- Base Enclosu	re Exterior		
•	hnical directives have been installed		
- Inspect LOS			
- Inspect Gage	s/Instrumentation		
Inspect Intake	•		
	ter Pads/Gaskets/Frames		
Test Blow in I			
	(Silencer level)		
Inspect Intake			
Inspect Bell M	outh Screen		
	Extinguishing System		
- Halon/C02 H	Bottles		
- Bypass valve			
- Conduit/actu	nation cables		
- Test pressure			
- Test time de	·		
	gs/check valves		
	ir Start and GTM Idle Checks		
Conduct HP A	ir Start and GTM Idle Checks		
Conduct Meth	anol Test		

REDUCTION	REDUCTION GEARS		
Component/Sub-Component	Proposed	Accepted	
	Procedure	Procedure	
Inspect Sump Level			
Inspect Lube Oil Condition			
Inspect Gear Teeth			
Inspect Lube Oil Spray Pattern			
Inspect Casing Interior			
Inspect Oil Flow in SFI's			
Inspect Temperature Gauges			
Inspect Casing Exterior			
Inspect Vent Fog Precipitator			
Inspect Dehumidifier			
Test Shaft Turning Gear			
Test GTM PT Brake Assemblies			
Inspect Input Shaft Seals			
Inspect Attached LO Pump Angle Drive Gear			
Test Attached LO Pump Engage/Disengage			
Test Attached CRP/CPP Pump Engage/Disengage			
Inspect Security Devices			
Inspect Flange Shielding			
Inspect Piping Systems			

LINE SHAFT F	LINE SHAFT BEARINGS		
Component/Sub-Component	Proposed	Accepted	
	Procedure	Procedure	
Inspect Sump Level			
Inspect Sump Drain Valve			
Inspect Seals			
Inspect Thermometer			
Inspect Lubricator			
Inspect Dip Stick			
Inspect Lock Wires			
Inspect Bearing Depth Mic Surface			
Inspect Foundation			

STERN 7	STERN TUBE SEALS		
Component/Sub-Component	Proposed	Accepted	
	Procedure	Procedure	
Inspect Gauges			
Inspect Cooling Water Piping			
Inspect Cooling Water Strainer/Filter			
Test Cooling Water Low Flow Alarm			
Inspect LP Air Supply			
Inspect LP Piping/Hoses/Fittings			
Inspect CO2/N2 Bottles/Piping/Fitting			
Test Inflatable Seal			
Inspect Emergency Flax Packing Kit			
Inspect Backing Ring			

CPP SY	CPP SYSTEMS		
Component/Sub-Component	Proposed	Accepted	
	Procedure	Procedure	
HOPM			
- Inspect Flex Hoses			
- Inspect Piping			
- Inspect Gages			
- Inspect Flange Shields			
Test Electric CRP Pump			
- Inspect Motor, Pump			
- Inspect Pump, Motor Driven			
- Inspect Mechanical Seal			
- Inspect Controller, Motor			
Inspect Oil Condition			
Verify Calibration between Consoles and OD box			
Test Slew Rate			
Test Command Pitch Mismatch Alarm			
Test Emergency Pitch Pump			
Attached CRP Pump			
- Inspect Mechanical Seal			

LUBE OIL SYSTEMS		
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Test MRG Lube Oil Sequencing		
Test Electric MRG Lube Oil Pump		
- Inspect Motor		
- Inspect Flexible coupling		
- Inspect Mechanical seal		
- Inspect Valves and piping		
- Inspect pump relief valves		
Inspect Attached MRG Lube Oil Pump		
- Inspect Flexible coupling		
- Inspect Mechanical seal		
- Inspect Valves and piping		
- Inspect pump relief valve		
Test/Inspect Lube Oil Strainer		
Inspect Temperature Regulating Valve		
Inspect Unloading Valve		
Inspect Lube Oil Purifier and Heater		

FUEL OII	SYSTEMS	
Component/Sub-Component	Proposed	Accepted
	Procedure	Procedure
Test Booster Pumps		
- Inspect Motor		
- Inspect Flexible coupling		
- Inspect Mechanical seal		
- Inspect Valves and piping		
- Inspect pump relief valves		
- Inspect Booster Pump Controller		
Conduct Fuel Oil Pump Sequence/Logics		
Inspect fuel oil service heater		
Inspect fuel oil service heater flanges		
Test Service Tank Recirc Valves		
Test Quick Closing Valves		
Test GTM Fuel Oil Solenoid Trip Valves		
Inspect instruments		
Inspect flexible hoses		
Inspect flange shields		
Inspect gages and instruments		

C	ONTROLS	
Component/Sub-Component	Proposed	Accepted
	Procedure	Procedure
Test PACC Alarms and Indicators		
Test PLCC Alarms and Indicators		
Conduct Torque Computer Test		
Test EOT Wrong Direction Alarm		
Inspect PACC		
Inspect PLCC		
Inspect PACC instruments		
Inspect PLCC instruments		
Test PACC on UPS		
Inspect Torsionmeter		
Inspect 800 Group Print		
Inspect and Test Bell/Data Logger Test Print		

BLEED AIR SYSTEMS		
Component/Sub-Component	Proposed	Accepted
Component Sub Component	Procedure	Procedure
Test Motor Air Reg valve		
Test Masker Air Transfer Valve		
Test Mixing Bypass valve		
Test High Temp Bleed valve		
Test Masker Cooler inlet valve		
Test PRAIRIE Air Cooler inlet valve		
Test GTM 16 <sup>th</sup> Stage Bleed Air valves		
Test GTG 14 <sup>th</sup> Stage Bleed Air valve		
Test GTG Start Air Cooler inlet valve		
Test HP Start Reg valve		
Inspect GTM Bleed Air Reg valves		
Inspect GTG Bleed Air Reg valve		
Test 3 GTG Bleed Air Isolation valve		
Inspect Prairie Air Roto Seal		
Inspect Flex hoses		
Inspect GTG Start Air Cooler		
Inspect Gauges/Instrumentation		
Inspect Piping/Fittings		
Inspect Masker Air Cooler		
Inspect Masker Air Cooler relief vlv		
Inspect Prairie Air Cooler		
Inspect Prairie Air Cooler relief vlv		
Inspect drain orifices		

	HULL S	TRUCTURE	
Comp	onent/Sub-Component	Proposed	Accepted
	· 	Procedure	Procedure
Bilges			
Bilge Suction Scr	eens		
Deck Plates			
Equipment Foundations			
Pipe Brackets/Hangers			
Paint and Preserva	ation		

FUEL OIL X	KFER SYSTEMS	
Component/Sub-Component	Proposed	Accepted
	Procedure	Procedure
Inspect Fuel Oil Purifier		
Inspect/Test Transfer Pumps		
- Inspect Motor		
- Inspect Flexible coupling		
- Inspect Mechanical seal		
- Inspect Valves and piping		
- Inspect pump relief valves		
- Inspect Transfer Pump Controller		
Inspect fuel oil transfer heater		
Inspect flexible hoses		
Inspect gages and instruments		-
Inspect flange shields		

	GAS TURBINE GENERATORS		
Component/Sub-Component		Proposed Procedure	Accepted Procedure
Turbine Enclos	ure		
- Inspect Comp	ressor:		
- Inspect Acces	sory Gear box:		
- Inspect Diffus	ser Case:		
- Inspect Comb	- Inspect Combuster:		
- Inspect Bleed	- Inspect Bleed Air Manifold		
- Inspect Electrical Wiring and Cables.			
- Inspect thermocouple harness and junction box			
- Inspect 5 <sup>th</sup> and 10 <sup>th</sup> stage bleed air valves			
- Inspect elastomers			
- Inspect engine side mounts			
- Inspect Enclosure Exterior			
- Inspect Enclosure Interior			
Reduction Gear Enclosure			
- Electrical Wiring and Cables.			
- Inspect reduction gear vent piping			
- Inspect PTO shaft housing speed pick-up			
- Inspect reduction gear lube oil sump level			
- Inspect starter			
Test Fire detection and extinguishing system			
- Halon/C02 Bottles			
- Bypass valve			
- Conduit/actuation cables			

- Test pressure switches	
- Test time delay	
- Hoses/fittings/check valves	
Inspect/shift duplex seawater cooling strainers	
Verify Engine lube oil sump level (23699)	
Inspect Lube oil coolers (23699/2190)	
Inspect thermocouple spread and average monitor	
Inspect Gages/Instruments	
Test RPM/Temp Channels	
Test LOCOP Alarms and Indicators	
Start GTG Verify all Start/Operating limits	

INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)		
Verify operational status of each workstation		
Verify number of required portable data terminals		
(PDT) and that they are operational		
Verify number of required portable diagnostic aids		
(PDA) and that they are operational		
Are any critical system errors shown in the system		
log?		
Ensure data for at least two routes from actual rounds		
Ensure data from Data Acquisition devices is being		
received as required		
Verify Demand Data is received and processed		
accurately		
Verify database data is received and processed		
accurately		
Ensure router connections are operating properly		
Ensure remote demand data and database data are		
available to be viewed.		
Verify all required system links are available		
Verify all ICAS printers are operational		
Verify picture book is available for vibration checks		
Verify vibration data is being taken per PMS		
Verify vibration disc are installed on all equipment		
Conduct vibration surveys on selected equipment		
during the full power demonstration		
Inspect all cabinet air filters		
Inspect all ICAS computer equipment		
Inspect computer internal shocks and fans		

### MAIN PROPULSION (MP) UNDERWAY PHASE CG 47

FULL POWER AND QUICK REVERSAL DEMONSTRATION		
Demonstrate Auto Plant Mode Logic (Split plant to	EOSS	
Full Power)		
Demonstrate Full Power ahead (1 hour)	PMS/EOSS/POG/9094.1B	
Demonstrate Quick Reversal Astern	POG/Full Power Memo/EOSS	
Demonstrate Full Power Astern (15 Min)	POG/Full Power Memo/EOSS	
Demonstrate Quick Reversal Ahead	POG/Full Power Memo/EOSS	
LUBE OIL PURIFIER DEMONSTRATION		
Demonstrate purifier operation	EOSS/PMS	
FUEL OIL TRANSFER DEMONSTRATION		
Demonstrate fuel oil purifier (s) operation	EOSS/PMS	
Demonstrate purifier (s)emergency stop capability	EOSS/PMS/Tech manual	

PRAIRIE/ MASKER/BLEED AIR SYSTEMS DEMONSTRATION			
	Proposed	Accepted	
	Procedure	Procedure	
Verify operation and calibration of all gauges and			
instruments (All applicable classes)			
Test GTM and GTG check valve operation (DD)			
Measure masker air flow rates to emitter belts in			
MER 1 and MER 2 (DD)			
Measure Prairie air flow rates in MER 1 and MER 2			
(DD)			
Measure masker air flow rates to main strut fairwater			
and main strut rope guard (DD)			
Test GTG bleed air pressure regulating valves (DD)			